1600

RAW SEQUENCE LISTING DATE: 04/07/2003
PATENT APPLICATION: **US/09/397,342C** TIME: 19:19:23

Input Set : **N:\AMC\I397342c.raw**
Output Set: **N:\CRF4\04072003\I397342C.raw**

```
      <110> APPLICANT: Adams, Sean
            Pan, James
            Zhong, Alan
      <120> TITLE OF INVENTION: UCP4
      <130> FILE REFERENCE: P1626R1
C-->  <140> CURRENT APPLICATION NUMBER: US/09/397,342C
      <141> CURRENT FILING DATE: 1999-09-15
      <150> PRIOR APPLICATION NUMBER: US 60/101,279
      <151> PRIOR FILING DATE: 1998-09-22
      <150> PRIOR APPLICATION NUMBER: US 60/114,223
      <151> PRIOR FILING DATE: 1998-12-30
      <150> PRIOR APPLICATION NUMBER: US 60/129,674
      <151> PRIOR FILING DATE: 1999-04-16
      <160> NUMBER OF SEQ ID NOS: 18
      <210> SEQ ID NO: 1
      <211> LENGTH: 323
      <212> TYPE: PRT
      <213> ORGANISM: Homo sapiens
      <400> SEQUENCE: 1
             Met Ser Val Pro Glu Glu Glu Glu Arg Leu Leu Pro Leu Thr Gln
               1               5                  10                  15
             Arg Trp Pro Arg Ala Ser Lys Phe Leu Leu Ser Gly Cys Ala Ala
                             20                  25                  30
             Thr Val Ala Glu Leu Ala Thr Phe Pro Leu Asp Leu Thr Lys Thr
                             35                  40                  45
             Arg Leu Gln Met Gln Gly Glu Ala Ala Leu Ala Arg Leu Gly Asp
                             50                  55                  60
             Gly Ala Arg Glu Ser Ala Pro Tyr Arg Gly Met Val Arg Thr Ala
                             65                  70                  75
             Leu Gly Ile Ile Glu Glu Glu Gly Phe Leu Lys Leu Trp Gln Gly
                             80                  85                  90
             Val Thr Pro Ala Ile Tyr Arg His Val Val Tyr Ser Gly Gly Arg
                             95                 100                 105
             Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe Gly Lys Ser
                            110                 115                 120
             Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly Met
                            125                 130                 135
             Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu
                            140                 145                 150
             Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly
                            155                 160                 165
             Lys Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile
                            170                 175                 180
```

RAW SEQUENCE LISTING DATE: 04/07/2003
PATENT APPLICATION: **US/09/397,342C** TIME: 19:19:23

Input Set : **N:\AMC\I397342c.raw**
Output Set: **N:\CRF4\04072003\I397342C.raw**

```
        Leu Ala Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val Pro
                        185                 190                 195
        Asn Ile Gln Arg Ala Ala Leu Val Asn Met Gly Asp Leu Thr Thr
                        200                 205                 210
        Tyr Asp Thr Val Lys His Tyr Leu Val Leu Asn Thr Pro Leu Glu
                        215                 220                 225
        Asp Asn Ile Met Thr His Gly Leu Ser Ser Leu Cys Ser Gly Leu
                        230                 235                 240
        Val Ala Ser Ile Leu Gly Thr Pro Ala Asp Val Ile Lys Ser Arg
                        245                 250                 255
        Ile Met Asn Gln Pro Arg Asp Lys Gln Gly Arg Gly Leu Leu Tyr
                        260                 265                 270
        Lys Ser Ser Thr Asp Cys Leu Ile Gln Ala Val Gln Gly Glu Gly
                        275                 280                 285
        Phe Met Ser Leu Tyr Lys Gly Phe Leu Pro Ser Trp Leu Arg Met
                        290                 295                 300
        Thr Pro Trp Ser Met Val Phe Trp Leu Thr Tyr Glu Lys Ile Arg
                        305                 310                 315
        Glu Met Ser Gly Val Ser Pro Phe
                        320
<210> SEQ ID NO: 2
<211> LENGTH: 1039
<212> TYPE: DNA
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 2
        ccgagctcgg atcccgttat cgtcttgcgc tactgctgaa tgtccgtccc 50
        ggaggaggag gagaggcttt tgccgctgac ccagagatgg ccccgagcga 100
        gcaaattcct actgtccggc tgcgcggcta ccgtggccga gctagcaacc 150
        tttcccctgg atctcacaaa aactcgactc caaatgcaag gagaagcagc 200
        tcttgctcgg ttgggagacg gtgcaagaga atctgccccc tataggggaa 250
        tggtgcgcac agccctaggg atcattgaag aggaaggctt tctaaagctt 300
        tggcaaggag tgacacccgc catttacaga cacgtagtgt attctggagg 350
        tcgaatggtc acatatgaac atctccgaga ggttgtgttt ggcaaaagtg 400
        aagatgagca ttatcccctt tggaaatcag tcattggagg gatgatggct 450
        ggtgttattg gccagttttt agccaatcca actgacctag tgaaggttca 500
        gatgcaaatg gaaggaaaaa ggaaactgga aggaaaacca ttgcgatttc 550
        gtggtgtaca tcatgcattt gcaaaaatct tagctgaagg aggaatacga 600
        gggctttggg caggctgggt acccaatata caaagagcag cactggtgaa 650
        tatgggagat ttaaccactt atgatacagt gaaacactac ttggtattga 700
        atacaccact tgaggacaat atcatgactc acggtttatc aagtttatgt 750
        tctggactgg tagcttctat tctgggaaca ccagccgatg tcatcaaaag 800
        cagaataatg aatcaaccac gagataaaca aggaagggga cttttgtata 850
        aatcatcgac tgactgcttg attcaggctg ttcaaggtga aggattcatg 900
        agtctatata aaggcttttt accatcttgg ctgagaatga ccccttggtc 950
        aatggtgttc tggcttactt atgaaaaaat cagagagatg agtggagtca 1000
        gtccatttta agaattctgc agatatccat cacactggc 1039
<210> SEQ ID NO: 3
<211> LENGTH: 31
<212> TYPE: DNA
```

RAW SEQUENCE LISTING DATE: 04/07/2003
PATENT APPLICATION: **US/09/397,342C** TIME: 19:19:23

Input Set : **N:\AMC\I397342c.raw**
Output Set: **N:\CRF4\04072003\I397342C.raw**

96 <213> ORGANISM: Artificial Sequence
97 <220> FEATURE:
98 <223> OTHER INFORMATION: Sequence is synthesized
99 <400> SEQUENCE: 3
100 cgcggatccc gttatcgtct tgcgctactg c 31
102 <210> SEQ ID NO: 4
103 <211> LENGTH: 34
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial Sequence
106 <220> FEATURE:
107 <223> OTHER INFORMATION: reverse primer
108 <400> SEQUENCE: 4
109 gcggaattct taaaatggac tgactccact catc 34
111 <210> SEQ ID NO: 5
112 <211> LENGTH: 1248
113 <212> TYPE: DNA
114 <213> ORGANISM: Artificial Sequence
115 <220> FEATURE:
116 <223> OTHER INFORMATION: Sequence is synthesized
117 <220> FEATURE:
118 <221> NAME/KEY: unsure
119 <222> LOCATION: 1231
120 <223> OTHER INFORMATION: unknown base
121 <400> SEQUENCE: 5
122 cgttatcgtc ttgcgctact gctgaatgtc cgtcccggag gaggaggaga 50
123 ggcttttgcc gctgacccag agatggcccc gagcgagcaa attcctactg 100
124 tccggctgcg cggctaccgt ggccgagcta gcaacctttc ccctggatct 150
125 cacaaaaact cgactccaaa tgcaaggaga agcagctctt gctcggttgg 200
126 gagacggtgc aagagaatct gccccctata ggggaatggt gcgcacagcc 250
127 ctagggatca ttgaagagga aggctttcta aagctttggc aaggagtgac 300
128 acccgccatt tacagacacg tagttatttc tggaggtcga atggtcacat 350
129 atgaacatct ccgagaggtt gtgtttggca aaagtgaaga tgagcattat 400
130 cccctttgga aatcagtcat tggagggatg atggctggtg ttattggcca 450
131 gtttttagcc aatccaactg acctagtgaa ggttcagatg caaatggaag 500
132 gaaaaaggaa actggaagga aaaccattgc gatttcgtgg tgtacatcat 550
133 gcatttgcaa aaatcttagc tgaaggagga atacgaaggc tttgggcagg 600
134 ctgggtaccc aatatacaaa gagcagcact ggtgaatatg ggagatttaa 650
135 ccacttatga tacagtgaaa cactacttgg tattgaatac accacttgag 700
136 gacaatatca tgactcacgg tttatcaagt ttatgttctg gactggtagc 750
137 ttctattctg ggaacaccag ccgatgtcat caaaagcaga ataatgaatc 800
138 aaccacgaga taaacaagga aggggacttt tgtataaatc atcgactgac 850
139 tgcttgattc aggctgttca aggtgaagga ttcatgagtc tatataaagg 900
140 ctttttacca tcttggctga gaatgacccc ttggtcaatg gtgttctggc 950
141 ttacttatga aaaaatcaga gagatgagtg gagtcagtcc attttaaacc 1000
142 cctaaagatg caacccttaa agatacagtg ttcagtatta ttgaaatatg 1050
143 ggcatctgca acacataccc cctattattt ctacctcttt aggaagacac 1100
144 ctattccaca gagactgatt tatagggggc agcactttat ttttttctgg 1150
145 aaacccaagt tctctttgac tcctcttttt gtccaaaagt gatctggtcg 1200
W--> 146 gatctcacaa ggccatccaa tgagaccccg nacagcattt tctaaaga 1248

RAW SEQUENCE LISTING DATE: 04/07/2003
PATENT APPLICATION: **US/09/397,342C** TIME: 19:19:23

Input Set : **N:\AMC\I397342c.raw**
Output Set: **N:\CRF4\04072003\I397342C.raw**

```
<210> SEQ ID NO: 6
<211> LENGTH: 58
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Sequence is synthesized
<400> SEQUENCE: 6
       cgcggatccg aaatggacta caaggacgac gatgacaagt ccgtcccgga 50
       ggaggagg 58
<210> SEQ ID NO: 7
<211> LENGTH: 35
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Sequence is synthesized
<400> SEQUENCE: 7
       gcgaagcttg ccatggttgg actgaagcct tcaga 35
<210> SEQ ID NO: 8
<211> LENGTH: 33
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: reverse primer
<400> SEQUENCE: 8
       cgcgaattct caaaacggtg attcccgtaa cat 33
<210> SEQ ID NO: 9
<211> LENGTH: 61
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Sequence is synthesized
<400> SEQUENCE: 9
       gcgaagcttg ccatggacta caaggacgac gatgacaagg ttggactgaa 50
       gccttcagac g 61
<210> SEQ ID NO: 10
<211> LENGTH: 19
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Sequence is synthesized
<400> SEQUENCE: 10
       aatgcctatc gccgaggag 19
<210> SEQ ID NO: 11
<211> LENGTH: 20
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: reverse primer
<400> SEQUENCE: 11
```

RAW SEQUENCE LISTING DATE: 04/07/2003
PATENT APPLICATION: **US/09/397,342C** TIME: 19:19:23

Input Set : **N:\AMC\I397342c.raw**
Output Set: **N:\CRF4\04072003\I397342C.raw**

```
202        gtaggaactt gctcgtccgg 20
204 <210> SEQ ID NO: 12
205 <211> LENGTH: 22
206 <212> TYPE: DNA
207 <213> ORGANISM: Artificial Sequence
208 <220> FEATURE:
209 <223> OTHER INFORMATION: Sequence is synthesized
210 <400> SEQUENCE: 12
211        tgctcgcgct cacgcagaga tg 22
213 <210> SEQ ID NO: 13
214 <211> LENGTH: 24
215 <212> TYPE: DNA
216 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Sequence is synthesized
219 <400> SEQUENCE: 13
220        gaaatcgtgc gtgacatcaa agag 24
222 <210> SEQ ID NO: 14
223 <211> LENGTH: 23
224 <212> TYPE: DNA
225 <213> ORGANISM: Artificial Sequence
226 <220> FEATURE:
227 <223> OTHER INFORMATION: reverse primer
228 <400> SEQUENCE: 14
229        ctccttctgc atcctgtcag caa 23
231 <210> SEQ ID NO: 15
232 <211> LENGTH: 22
233 <212> TYPE: DNA
234 <213> ORGANISM: Artificial Sequence
235 <220> FEATURE:
236 <223> OTHER INFORMATION: Sequence is synthesized
237 <400> SEQUENCE: 15
238        cggttccgat gccctgaggc tc 22
240 <210> SEQ ID NO: 16
241 <211> LENGTH: 307
242 <212> TYPE: PRT
243 <213> ORGANISM: Homo sapiens
244 <400> SEQUENCE: 16
245       Met Gly Gly Leu Thr Ala Ser Asp Val His Pro Thr Leu Gly Val
246         1               5                  10                  15
247       Gln Leu Phe Ser Ala Pro Ile Ala Ala Cys Leu Ala Asp Val Ile
248                       20                  25                  30
249       Thr Phe Pro Leu Asp Thr Ala Lys Val Arg Leu Gln Val Gln Gly
250                       35                  40                  45
251       Glu Cys Pro Thr Ser Ser Val Ile Arg Tyr Lys Gly Val Leu Gly
252                       50                  55                  60
253       Thr Ile Thr Ala Val Val Lys Thr Glu Gly Arg Met Lys Leu Tyr
254                       65                  70                  75
255       Ser Gly Leu Pro Ala Gly Leu Gln Arg Gln Ile Ser Ser Ala Ser
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 04/07/2003
PATENT APPLICATION: **US/09/397,342C** TIME: 19:19:24

Input Set : **N:\AMC\I397342c.raw**
Output Set: **N:\CRF4\04072003\I397342C.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; N Pos. 1231

1600

RAW SEQUENCE LISTING DATE: 04/07/2003
PATENT APPLICATION: **US/09/397,342C** TIME: 14:36:34

Input Set : **A:\P1626R1.txt**
Output Set: **N:\CRF4\04072003\I397342C.raw**

Does Not Comply
Corrected Diskette Needed

```
W--> 1 Patin Docket Preview
     7 <110> APPLICANT: Adams, Sean
     8       Pan, James
     9       Zhong, Alan
    11 <120> TITLE OF INVENTION: UCP4
    13 <130> FILE REFERENCE: P1626R1
    15 <140> CURRENT APPLICATION NUMBER: US 09/397,342C
    16 <141> CURRENT FILING DATE: 1999-09-15
    18 <150> PRIOR APPLICATION NUMBER: US 60/101,279
    19 <151> PRIOR FILING DATE: 1998-09-22
    21 <150> PRIOR APPLICATION NUMBER: US 60/114,223
    22 <151> PRIOR FILING DATE: 1998-12-30
    24 <150> PRIOR APPLICATION NUMBER: US 60/129,674
    25 <151> PRIOR FILING DATE: 1999-04-16
    27 <160> NUMBER OF SEQ ID NOS: 18
    29 <210> SEQ ID NO: 1
    30 <211> LENGTH: 323
    31 <212> TYPE: PRT
    32 <213> ORGANISM: Homo sapiens
    34 <400> SEQUENCE: 1
    35  Met Ser Val Pro Glu Glu Glu Glu Arg Leu Leu Pro Leu Thr Gln
    36   1               5                  10                  15
    38  Arg Trp Pro Arg Ala Ser Lys Phe Leu Leu Ser Gly Cys Ala Ala
    39                  20                  25                  30
    41  Thr Val Ala Glu Leu Ala Thr Phe Pro Leu Asp Leu Thr Lys Thr
    42                  35                  40                  45
    44  Arg Leu Gln Met Gln Gly Glu Ala Ala Leu Ala Arg Leu Gly Asp
    45                  50                  55                  60
    47  Gly Ala Arg Glu Ser Ala Pro Tyr Arg Gly Met Val Arg Thr Ala
    48                  65                  70                  75
    50  Leu Gly Ile Ile Glu Glu Glu Gly Phe Leu Lys Leu Trp Gln Gly
    51                  80                  85                  90
    53  Val Thr Pro Ala Ile Tyr Arg His Val Val Tyr Ser Gly Gly Arg
    54                  95                 100                 105
    56  Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe Gly Lys Ser
    57                 110                 115                 120
    59  Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly Met
    60                 125                 130                 135
    62  Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu
    63                 140                 145                 150
    65  Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly
    66                 155                 160                 165
    68  Lys Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile
```

RAW SEQUENCE LISTING DATE: 04/07/2003
PATENT APPLICATION: **US/09/397,342C** TIME: 14:36:34

Input Set : **A:\P1626R1.txt**
Output Set: **N:\CRF4\04072003\I397342C.raw**

```
69                  170                 175                 180
71  Leu Ala Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val Pro
72                  185                 190                 195
74  Asn Ile Gln Arg Ala Ala Leu Val Asn Met Gly Asp Leu Thr Thr
75                  200                 205                 210
77  Tyr Asp Thr Val Lys His Tyr Leu Val Leu Asn Thr Pro Leu Glu
78                  215                 220                 225
80  Asp Asn Ile Met Thr His Gly Leu Ser Ser Leu Cys Ser Gly Leu
81                  230                 235                 240
83  Val Ala Ser Ile Leu Gly Thr Pro Ala Asp Val Ile Lys Ser Arg
84                  245                 250                 255
86  Ile Met Asn Gln Pro Arg Asp Lys Gln Gly Arg Gly Leu Leu Tyr
87                  260                 265                 270
89  Lys Ser Ser Thr Asp Cys Leu Ile Gln Ala Val Gln Gly Glu Gly
90                  275                 280                 285
92  Phe Met Ser Leu Tyr Lys Gly Phe Leu Pro Ser Trp Leu Arg Met
93                  290                 295                 300
95  Thr Pro Trp Ser Met Val Phe Trp Leu Thr Tyr Glu Lys Ile Arg
96                  305                 310                 315
98  Glu Met Ser Gly Val Ser Pro Phe
99                  320
101 <210> SEQ ID NO: 2
102 <211> LENGTH: 1039
103 <212> TYPE: DNA
104 <213> ORGANISM: Homo sapiens
106 <400> SEQUENCE: 2
107  ccgagctcgg atcccgttat cgtcttgcgc tactgctgaa tgtccgtccc 50
109  ggaggaggag gagaggcttt tgccgctgac ccagagatgg ccccgagcga 100
111  gcaaattcct actgtccggc tgcgcggcta ccgtggccga gctagcaacc 150
113  tttcccctgg atctcacaaa aactcgactc caaatgcaag gagaagcagc 200
115  tcttgctcgg ttgggagacg gtgcaagaga atctgccccc tataggggaa 250
117  tggtgcgcac agccctaggg atcattgaag aggaaggctt tctaaagctt 300
119  tggcaaggag tgacacccgc catttacaga cacgtagtgt attctggagg 350
121  tcgaatggtc acatatgaac atctccgaga ggttgtgttt ggcaaaagtg 400
123  aagatgagca ttatcccctt tggaaatcag tcattggagg gatgatggct 450
125  ggtgttattg gccagttttt agccaatcca actgacctag tgaaggttca 500
127  gatgcaaatg gaaggaaaaa ggaaactgga aggaaaacca ttgcgatttc 550
129  gtggtgtaca tcatgcattt gcaaaaatct tagctgaagg aggaatacga 600
131  gggctttggg caggctgggt acccaatata caaagagcag cactggtgaa 650
133  tatgggagat ttaaccactt atgatacagt gaaacactac ttggtattga 700
135  atacaccact tgaggacaat atcatgactc acggtttatc aagtttatgt 750
137  tctggactgg tagcttctat tctgggaaca ccagccgatg tcatcaaaag 800
139  cagaataatg aatcaaccac gagataaaca aggaagggga cttttgtata 850
141  aatcatcgac tgactgcttg attcaggctg ttcaaggtga aggattcatg 900
143  agtctatata aaggcttttt accatcttgg ctgagaatga ccccttggtc 950
145  aatggtgttc tggcttactt atgaaaaaat cagagagatg agtggagtca 1000
147  gtccatttta agaattctgc agatatccat cacactggc 1039
149 <210> SEQ ID NO: 3
150 <211> LENGTH: 31
```

RAW SEQUENCE LISTING DATE: 04/07/2003
PATENT APPLICATION: **US/09/397,342C** TIME: 14:36:34

Input Set : **A:\P1626R1.txt**
Output Set: **N:\CRF4\04072003\I397342C.raw**

151 <212> TYPE: DNA
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: Sequence is synthesized
157 <400> SEQUENCE: 3
158 cgcggatccc gttatcgtct tgcgctactg c 31
160 <210> SEQ ID NO: 4
161 <211> LENGTH: 34
162 <212> TYPE: DNA
163 <213> ORGANISM: Artificial Sequence
165 <220> FEATURE:
166 <223> OTHER INFORMATION: reverse primer
168 <400> SEQUENCE: 4
169 gcggaattct taaaatggac tgactccact catc 34
171 <210> SEQ ID NO: 5
172 <211> LENGTH: 1248
173 <212> TYPE: DNA
174 <213> ORGANISM: Artificial Sequence
176 <220> FEATURE:
177 <223> OTHER INFORMATION: Sequence is synthesized
179 <220> FEATURE:
180 <221> NAME/KEY: unsure
181 <222> LOCATION: 1231
182 <223> OTHER INFORMATION: unknown base
184 <400> SEQUENCE: 5
185 cgttatcgtc ttgcgctact gctgaatgtc cgtcccggag gaggaggaga 50
187 ggcttttgcc gctgacccag agatggcccc gagcgagcaa attcctactg 100
189 tccggctgcg cggctaccgt ggccgagcta gcaacctttc ccctggatct 150
191 cacaaaaact cgactccaaa tgcaaggaga agcagctctt gctcggttgg 200
193 gagacggtgc aagagaatct gccccctata ggggaatggt gcgcacagcc 250
195 ctagggatca ttgaagagga aggctttcta aagctttggc aaggagtgac 300
197 acccgccatt tacagacacg tagttatttc tggaggtcga atggtcacat 350
199 atgaacatct ccgagaggtt gtgtttggca aaagtgaaga tgagcattat 400
201 cccctttgga aatcagtcat tggagggatg atggctggtg ttattggcca 450
203 gtttttagcc aatccaactg acctagtgaa ggttcagatg caaatggaag 500
205 gaaaaaggaa actggaagga aaaccattgc gatttcgtgg tgtacatcat 550
207 gcatttgcaa aaatcttagc tgaaggagga atacgaaggc tttgggcagg 600
209 ctgggtaccc aatatacaaa gagcagcact ggtgaatatg ggagatttaa 650
211 ccacttatga tacagtgaaa cactacttgg tattgaatac accacttgag 700
213 gacaatatca tgactcacgg tttatcaagt ttatgttctg gactggtagc 750
215 ttctattctg ggaacaccag ccgatgtcat caaaagcaga ataatgaatc 800
217 aaccacgaga taaacaagga aggggacttt tgtataaatc atcgactgac 850
219 tgcttgattc aggctgttca aggtgaagga ttcatgagtc tatataaagg 900
221 ctttttacca tcttggctga gaatgacccc ttggtcaatg gtgttctggc 950
223 ttacttatga aaaaatcaga gagatgagtg gagtcagtcc attttaaacc 1000
225 cctaaagatg caacccttaa agatacagtg ttcagtatta ttgaaatatg 1050
227 ggcatctgca acacataccc cctattattt ctacctcttt aggaagacac 1100
229 ctattccaca gagactgatt tatagggggc agcactttat ttttttctgg 1150
231 aaacccaagt tctctttgac tcctcttttt gtccaaaagt gatctggtcg 1200

RAW SEQUENCE LISTING DATE: 04/07/2003
PATENT APPLICATION: **US/09/397,342C** TIME: 14:36:34

Input Set : **A:\P1626R1.txt**
Output Set: **N:\CRF4\04072003\I397342C.raw**

W--> 233 gatctcacaa ggccatccaa tgagaccccg nacagcattt tctaaaga 1248
235 <210> SEQ ID NO: 6
236 <211> LENGTH: 58
237 <212> TYPE: DNA
238 <213> ORGANISM: Artificial Sequence
240 <220> FEATURE:
241 <223> OTHER INFORMATION: Sequence is synthesized
243 <400> SEQUENCE: 6
244 cgcggatccg aaatggacta caaggacgac gatgacaagt ccgtcccgga 50
246 ggaggagg 58
248 <210> SEQ ID NO: 7
249 <211> LENGTH: 35
250 <212> TYPE: DNA
251 <213> ORGANISM: Artificial Sequence
253 <220> FEATURE:
254 <223> OTHER INFORMATION: Sequence is synthesized
256 <400> SEQUENCE: 7
257 gcgaagcttg ccatggttgg actgaagcct tcaga 35
259 <210> SEQ ID NO: 8
260 <211> LENGTH: 33
261 <212> TYPE: DNA
262 <213> ORGANISM: Artificial Sequence
264 <220> FEATURE:
265 <223> OTHER INFORMATION: reverse primer
267 <400> SEQUENCE: 8
268 cgcgaattct caaaacggtg attcccgtaa cat 33
270 <210> SEQ ID NO: 9
271 <211> LENGTH: 61
272 <212> TYPE: DNA
273 <213> ORGANISM: Artificial Sequence
275 <220> FEATURE:
276 <223> OTHER INFORMATION: Sequence is synthesized
278 <400> SEQUENCE: 9
279 gcgaagcttg ccatggacta caaggacgac gatgacaagg ttggactgaa 50
281 gccttcagac g 61
283 <210> SEQ ID NO: 10
284 <211> LENGTH: 19
285 <212> TYPE: DNA
286 <213> ORGANISM: Artificial Sequence
288 <220> FEATURE:
289 <223> OTHER INFORMATION: Sequence is synthesized
291 <400> SEQUENCE: 10
292 aatgcctatc gccgaggag 19
294 <210> SEQ ID NO: 11
295 <211> LENGTH: 20
296 <212> TYPE: DNA
297 <213> ORGANISM: Artificial Sequence
299 <220> FEATURE:
300 <223> OTHER INFORMATION: reverse primer

RAW SEQUENCE LISTING DATE: 04/07/2003
PATENT APPLICATION: **US/09/397,342C** TIME: 14:36:34

Input Set : **A:\P1626R1.txt**
Output Set: **N:\CRF4\04072003\I397342C.raw**

<400> SEQUENCE: 11
gtaggaactt gctcgtccgg 20
<210> SEQ ID NO: 12
<211> LENGTH: 22
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Sequence is synthesized
<400> SEQUENCE: 12
tgctcgcgct cacgcagaga tg 22
<210> SEQ ID NO: 13
<211> LENGTH: 24
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Sequence is synthesized
<400> SEQUENCE: 13
gaaatcgtgc gtgacatcaa agag 24
<210> SEQ ID NO: 14
<211> LENGTH: 23
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: reverse primer
<400> SEQUENCE: 14
ctccttctgc atcctgtcag caa 23
<210> SEQ ID NO: 15
<211> LENGTH: 22
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Sequence is synthesized
<400> SEQUENCE: 15
cggttccgat gccctgaggc tc 22
<210> SEQ ID NO: 16
<211> LENGTH: 307
<212> TYPE: PRT
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 16
Met Gly Gly Leu Thr Ala Ser Asp Val His Pro Thr Leu Gly Val
1 5 10 15
Gln Leu Phe Ser Ala Pro Ile Ala Ala Cys Leu Ala Asp Val Ile
20 25 30
Thr Phe Pro Leu Asp Thr Ala Lys Val Arg Leu Gln Val Gln Gly
35 40 45
Glu Cys Pro Thr Ser Ser Val Ile Arg Tyr Lys Gly Val Leu Gly
50 55 60
Thr Ile Thr Ala Val Val Lys Thr Glu Gly Arg Met Lys Leu Tyr
65 70 75

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 04/07/2003
PATENT APPLICATION: **US/09/397,342C** TIME: 14:36:35

Input Set : **A:\P1626R1.txt**
Output Set: **N:\CRF4\04072003\I397342C.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; N Pos. 1231

VERIFICATION SUMMARY DATE: 04/07/2003
PATENT APPLICATION: **US/09/397,342C** TIME: 14:36:35

Input Set : **A:\P1626R1.txt**
Output Set: **N:\CRF4\04072003\I397342C.raw**

L:1 M:259 W: Allowed number of lines exceeded, (1) GENERAL INFORMATION:
L:233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:1200